

CLAIMS:

1. An automatic picture setting adjustment circuit comprising:
a source (20) for color video signals;
adjustable gamma correction circuits (22, 24, 26) for each of said color video signals, each of said adjustable gamma correction circuits having a control input for receiving a respective gamma control signal for controlling an amount of gamma correction performed;
an ambient light sensing circuit (44) for generating a gamma adjusting signal in dependence on a detected amount of ambient light; and
means (32, 34, 36, 40, 60) for generating said respective gamma control signals from said gamma adjusting signal.
2. The automatic picture setting adjustment circuit as claimed in claim 1, wherein said source (20) for color signals comprises a matrix circuit for receiving color difference signals and a luminance signal, said matrix circuit generating said color video signals.
3. The automatic picture setting adjustment circuit as claimed in claim 1, wherein said automatic picture setting adjustment circuit further comprises a presetting circuit (38) for providing pre-set signals indicative of an initial operating condition for each of said adjustable gamma correction circuits, said generating means (32, 34, 36, 40, 60) generating said respective gamma control signals from said pre-set signals and said gamma adjusting signal.
4. The automatic picture setting adjustment circuit as claimed in claim 1, wherein said automatic picture setting adjustment circuit further comprises a user input (42) for supplying a user control signal indicative of a desired overall setting by a user, said generating means (32, 34, 36, 40, 60) generating said respective gamma control signals from said user control signal and said gamma adjusting signal.
5. The automatic picture setting adjustment circuit as claimed in claim 1, wherein each of said adjustable gamma correction circuits (22, 24, 26) comprises a serial arrangement of a log amplifier (50) for receiving the color video signal, a variable gain amplifier (52) coupled to an output of the log amplifier (50), said variable gain amplifier (52) having a control input (54) for receiving the respective gamma control signal, and an anti-log amplifier (56)

coupled to an output of the variable gain amplifier (52), an output of the anti-log amplifier (56) forming an output of the adjustable gamma correction circuit.

6. The automatic picture setting adjustment circuit as claimed in claim 5, wherein said source (20) for color signals comprises a matrix circuit for receiving color difference signals and a luminance signal, said matrix circuit generating said color video signals.

7. The automatic picture setting adjustment circuit as claimed in claim 5, wherein said automatic picture setting adjustment circuit further comprises a presetting circuit (38) for providing pre-set signals indicative of an initial operating condition for each of said adjustable gamma correction circuits, said generating means (32, 34, 36, 40) generating said respective gamma control signals from said pre-set signals and said gamma adjusting signal.

8. The automatic picture setting adjustment circuit as claimed in claim 5, wherein said automatic picture setting adjustment circuit further comprises a user input (42) for supplying a user control signal indicative of a desired overall setting by a user, said generating means (32, 34, 36, 40) generating said respective gamma control signals from said user control signal and said gamma adjusting signal.

9. The automatic picture setting adjustment circuit as claimed in claim 1, wherein each of said adjustable gamma correction circuits comprise a look-up table (22', 24', 26') in which the respective color video signal is applied to an address input, and said generating means comprises a microprocessor (60) for calculating the gamma values as said respective gamma control signals for application to the adjustable gamma correction circuits.

10. The automatic picture setting adjustment circuit as claimed in claim 9, wherein said automatic picture setting adjustment circuit further comprises a user input (42) for supplying a user control signal indicative of a desired overall setting by a user, said microprocessor (60) generating said gamma values from said user control signal and said gamma adjusting signal.